

In the Claims

Claims 1-46 (canceled)

47. (previously presented) A dual gate oxide complementary metal oxide semiconductor (CMOS) RF power amplifier for a wireless transmission system comprising:

RF power amplifier input stage circuitry including devices with a first gate oxide thickness;

RF power amplifier output stage circuitry having devices with a second gate oxide thickness; and

wherein the first gate oxide thickness is less than the second gate oxide thickness, and wherein the first gate oxide thickness is related to desired breakdown voltage levels of devices in the input stage circuitry and the second gate oxide thickness is related to desired breakdown voltage levels of devices in the output stage circuitry.

48. (previously presented) The RF power amplifier of claim 47, wherein the first gate oxide thickness is approximately 70 Angstroms.

49. (previously presented) The RF power amplifier of claim 47, wherein the second gate oxide thickness is approximately 140 Angstroms.

50. (previously presented) The RF power amplifier of claim 47, wherein the input stage further comprises one or more inverters.

51. (previously presented) The RF power amplifier of claim 50, wherein the output stage further comprises a plurality of switching devices.

52. (previously presented) A cellular telephone apparatus comprising:  
a transceiver for transmitting and receiving signals;  
a complementary metal oxide semiconductor (CMOS) RF power amplifier coupled to the transceiver, the RF power amplifier having input stage circuitry including devices with a first gate oxide thickness and output stage circuitry having devices with a second gate oxide thickness, wherein the first gate oxide thickness is less than the second gate oxide thickness, and wherein the first gate oxide thickness is related to desired breakdown voltage levels of devices in the input stage circuitry and the second gate oxide thickness is related to desired breakdown voltage levels of devices in the output stage circuitry; and  
an antenna coupled to the RF power amplifier and the transceiver for transmitting and receiving signals.

53. (previously presented) The cellular telephone apparatus of claim 52, wherein the first gate oxide thickness is approximately 70 Angstroms.

54. (previously presented) The cellular telephone apparatus of claim 52, wherein the second gate oxide thickness is approximately 140 Angstroms.

55. (previously presented) The cellular telephone apparatus of claim 52, wherein the input stage further comprises one or more inverters.

56. (previously presented) The cellular telephone apparatus of claim 55, wherein the output stage further comprises a plurality of switching devices.

57. (previously presented) A method of providing a CMOS RF power amplifier for a wireless transmission system comprising:

providing an input stage including one or more devices having a first gate oxide thickness;

providing an output stage including a plurality of switching devices having a second gate oxide thickness; and

selecting the thickness of the first and second gate oxides such that the second gate oxide thickness is greater than the first gate oxide thickness, wherein the first gate oxide thickness is selected based on desired breakdown voltage levels of devices in the input stage and the second gate oxide thickness is selected based on desired breakdown voltage levels of devices in the output stage.

58. (previously presented) The method of claim 57, further comprising forming the RF power amplifier on a single integrated circuit.

59. (previously presented) The method of claim 57, wherein the first gate oxide thickness is approximately 70 Angstroms.

60. (previously presented) The method of claim 57, wherein the second gate oxide thickness is approximately 140 Angstroms.

61. (previously presented) The method of claim 57, wherein the first portion forms a preamplifier circuit.

62. (previously presented) The method of claim 61, wherein the second portion forms an amplifier circuit.